

AMENDMENTS TO THE SPECIFICATION:

Please REPLACE the paragraphs beginning at page 10, line 15 and ending at page 14, line 16, with the following rewritten paragraphs:

The character recognition device 1 includes an input deviceprogram 10, an input file 11, a first recognition deviceprogram 12, a first recognition glossary 13, a first recognition results file 14, a second recognition deviceprogram 15, a second recognition glossary 16, a second recognition results file 17, an extraction deviceprogram 18, an output file 19 and an output deviceprogram 20.

The text images read by the image scanner 2 are input to the input deviceprogram 10. The input file 11 stores the text images which are input by the input deviceprogram 10 as, for example, binary text images.

2 The first recognition deviceprogram 12 recognizes characters in the text images that are input by the input deviceprogram 10 according to a prescribed recognition method. The first recognition glossary 13 controls the glossary data required for the recognition processing performed by the first recognition deviceprogram 12. The first recognition results file 14 stores the recognition results of the first recognition deviceprogram 12.

The second recognition deviceprogram 15 recognizes the characters in the text images that are input by the input deviceprogram 10 according to another recognition method different from the recognition method used by the first recognition deviceprogram 12. The second recognition glossary 16 controls the glossary data required for the recognition processing performed by the second recognition deviceprogram 15. The second recognition results file 17 stores the recognition results of the second recognition deviceprogram 15.

The extraction deviceprogram 18 extracts the non-coinciding locations in the recognition results of the first recognition deviceprogram 12 and the recognition results of the second recognition deviceprogram 15.

The output file 19 records the non-coinciding locations that are extracted by the extraction deviceprogram 18 while storing the recognition results of the first and second recognition deviceprograms 12 and 15. The output deviceprogram 20 designates the non-coinciding locations extracted by the extraction deviceprogram 18, while outputting the recognition results for the characters in the text images that have been input by the input deviceprogram 10.

In accordance with embodiments of the present invention, the operation of the character recognition device 1 is preferably controlled by a character recognition program. The character recognition program is stored in a computer readable medium encoded with processing instructions for implementing character recognition. For example, the program may be stored on a floppy disk or the like, on a server, or other types of disks, and is installed in memory in the character recognition device 1.

In operation of the character recognition device in accordance with embodiments of the present invention, the first recognition deviceprogram 12 recognizes the characters in the text images that are input by the input deviceprogram 10 according to a first prescribed type of character recognition method. The second recognition deviceprogram 15 recognizes the characters in the text images input by the input deviceprogram 10 using a second character recognition method different from the recognition method used by the first recognition deviceprogram 12.

2 The extraction deviceprogram 18 receives the recognition results and extracts the non-coinciding locations in the recognition results of the first recognition deviceprogram 12 and the recognition results of the second recognition deviceprogram 15. The extraction results are received and the output deviceprogram 20 designates the non-coinciding locations that are extracted by the extraction deviceprogram 18. At the same time, the recognition results of the characters in the text images input by the input deviceprogram 10 are output.

In accordance with embodiments of the present invention, the output deviceprogram 20 contrasts the input text images and the recognition results, and outputs the recognition results by displaying the recognition results on the display screen 3. Furthermore, a cursor is displayed on the display area of the recognition results such that the text images are displayed in a format that clearly indicates the location of the text images coordinated to the cursor position.

Moreover, in accordance with embodiments of the present invention, the output deviceprogram 20 provides an output in a format that makes it possible to understand that while the recognition results do coincide, the reliability of the recognition process itself is low.

Thus, in accordance with embodiments of the present invention, when recognizing characters in the text images, the character recognition device 1 uses multiple recognition deviceprograms that respectively use different recognition methods for processing the text images read by the image scanner 2. The non-coinciding locations of the recognition results of the multiple recognition deviceprograms are extracted and the non-coinciding locations are

designated while at the same time, the character recognition results are output. In accordance with the present invention, the user can instantly see the erroneously read characters in the recognition results, thus making it possible to efficiently check such erroneously read characters.

FIG. 2 is a block diagram of a character recognition device in accordance with embodiments of the present invention. Elements shown in FIG. 2 which are the same as those shown in FIG. 1 are referred to by like reference numbers.

As shown in FIG. 2, a terminal 3a including a display, a mouse and other input devices, is used for communication with the user. An input program 10a inputs text images read by the image scanner 2, in a manner similar to the input deviceprogram 10 shown in FIG. 1. A first recognition program 12a, a second recognition program 15a, an extraction program 18a and an output program 20a operate in the same manner as the first recognition deviceprogram 12, the second recognition deviceprogram 15, the extraction deviceprogram 18, and the output deviceprogram 20, respectively, shown in FIG. 1.
